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EDITORIAL

Cancer and How to Combat it

(Contd. from p. 171, Vol. XVIII, No. 8, 'Health')

In our Editorial, last month, we dwelt on the past history of the causation of cancer. The old theories were all empirical and so were discarded. Though the origin of cancer is still shrouded in mystery, yet, scientific researchers have, after laborious experimentation and keen observation, arrived at certain definite conclusions which have paved the way for the successful treatment of cancer cases. These conclusions are that:

(1) Cancer is a disturbance of growth in the fundamental unit of body structure, viz. the individual cell.

(2) Cancer is a condition in which body cells break through the normal rules of controlled cell growth and grow 'wild'.

(3) Cancer is seldom caused by one injury, except possibly in bones but repeated injury, or irritation may bring about cancer.

(4) Cancer is neither hereditary, contagious or infectious, nor is it caused by any germ.

(5) Cancers are curable if detected and treated early.

(6) Cancers, unless removed, continue to grow and spread until the outcome is fatal.

(7) Cancers are not evidence of wrong doing on the part of the patient and, therefore, are nothing of which to be ashamed.

There are various types of cancer, of which the following will be of special interest to laymen:—

1. *Aniline Cancer or Dye Workers' Cancer*:—This is due to aniline dyes, occurring among those who work in dye factories and dyeing establishments;

2. *Buyo Cheek Cancer*, or cancer of the cheek seen in natives of the Phillipine islands (also India) from chewing buyo leaf or betel.

3. *Chimney Sweep's Cancer, Soot Wart, or Soot Cancer* :—This is cancer of the scrotum due to soot poisoning;

4. *Corset Cancer* :— Also called jacket cancer, or cancer about the skin of the thorax, due to wearing tight jackets or corsets.

5. *Kangri Cancer* or epithelioma in the thigh or abdomen affecting natives of Kashmir and attributed to irritation from the Kangri or fire basket.

6. *Mule Spinner's Cancer* :—This is cancer affecting mule spinners in the cotton-spinning industry.

7. *Paraffin Cancer* :—This affects those who work in paraffin industry.

8. *Pitch - worker's Cancer* :—Epithelioma of the face, neck and scrotum in those who work in pitch.

9. *Roentgenologist's Ulcer* :—This is cancer affecting the hands of those who work in roentgen rays.

10. *Smoker's Cancer* :— Epithelioma of the lips due to irritation by the pipe stem: also cancer of the throat due to excessive smoking.

11. *Tar Cancer* :—caused by inflammatory irritation of tar.

Now, what are the signs and symptoms of cancer.

(1) A lump which grows :

(2) A sore which does not heal or which heals and comes back ;

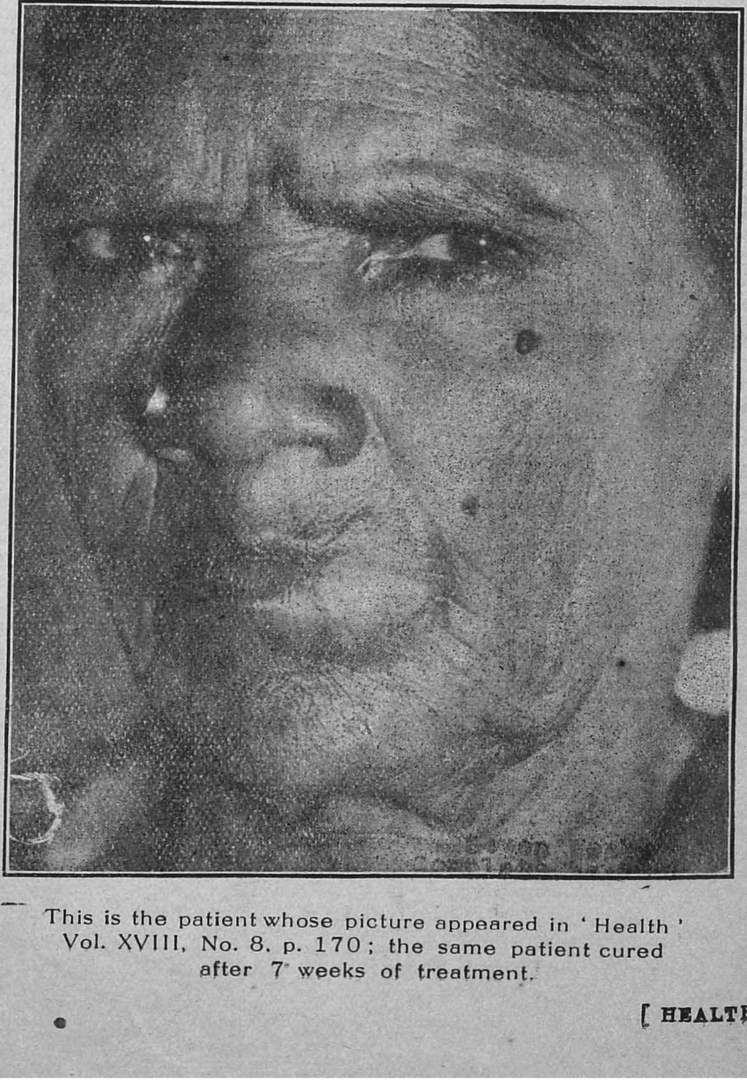
(3) Abnormal bleeding or discharge from any part of the body : especially from the generative organs of women, or from the rectum or urinary system of either sex :

(4) A mole, especially a black mole with hair, which grows, bleeds or shows signs of irritation ;

(5) Indefinite signs of indigestion appearing suddenly in otherwise healthy persons of middle ages ;

(6) Absence of pain, except in the very last stages.

Cancer was at one time held to be an incurable disease, a disease which like syphilis or leprosy, must be kept out of the doctor's knowledge. Treatment is neglected in early cases, due to fear of social stigma, ignorance



This is the patient whose picture appeared in 'Health' Vol. XVIII, No. 8, p. 170 ; the same patient cured after 7 weeks of treatment.

and superstition. Delay in treatment is one of the principal causes of the high mortality from cancer. In fact, in the United States of America, cancer is regarded as *Public Enemy No. 2*, No. 1. being heart disease. Treatment consists in Surgery, X-rays and Radium. No pills or potions, salve or paste, injections or medicines will avail. There is no half-way house in regard to the treatment of cancer. No doubt, the treatment is costly, owing to the spareseness of Radium in the world. But, if precious lives have to be saved, the expenses must be met. Institutional treatment is always preferable.

In the treatment of cancer, delay is dangerous. Therefore, if any person should find any lump that appears in the body, or any unilateral change in shape of structure or suffer from chronic indigestion or constipation, he must suspect cancer and run to an institution for proper treatment. He should not neglect it because it did not pain nor should he wait for pain which comes only at the last stage. He should not feel ashamed of cancer, for it is not of his making or deliberate wrong-doing. To wait until there are characteristic symptoms such as pain, loss of weight, anæmia or actual tumour, is suicidal, for at this stage, treatment may be ineffectual. So much for the patient. A stern duty also devolves on the family doctor. It often happens that the family doctor who is generally the first to be consulted, without proper microscopical examination or careful listening to the history of the case, treats his patient as if it is an ordinary ulcer, indigestion or constipation as the case may be. The doctor must first rule out cancer before he attempts to treat all surface lesions which do not promptly heal, all nodular growths, persistent alteration in the habit of bowel evacuation and all conditions affecting digestion and the stomach which do not promptly and completely respond to treatment, particularly after middle age.

There is also a duty devolved on the State or Public Bodies. By incessant propaganda by magic lantern slides and the like, they must try to dispel the mist of superstition and ignorance that is rampant among the public. In the United States of America, a club has been formed of all cancer patients who have been completely cured of this disease, after proper treatment. This Club called the 'Cured Cancer Club' was founded by one Dr. Palmer in 1938, who was cured of her breast cancer and was enjoying perfect immunity thereafter. She began a one-woman campaign to create a frank attitude toward cancer. Now there are organisations in half-a-dozen States. "Their programme will be a unique attack on the superstition and fear that for years has hindered doctors in their attempts to cope with cancer. And with more than 29,000 people as living proof that cancer can be cured, they are determined to banish the spectre of ignorance that has made the disease one of the world's worst scourges." Will India also wake up and do the needful, in time, by way of propaganda and publicity, to wipe out cancer from her midst?

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THE HYGIENE OF THE BOWELS

BY G. RAMAN PILLAI, M.B., Ch.B., (Edin.),

TRIVANDRUM.

(Contd. from p. 177 of Aug. '40 issue of Health.'.)

Medicinal intercession has to be resorted to when the (aforesaid) simpler means are unsatisfactory. Usually, a doctor's advice had better be taken, as every case has to be treated on its merits, and constitutions differ. Medicines are either: (1) laxatives that almost persuade the bowels to function naturally, or, (2) purgatives that coerce it, more or less. In short, a 'non-violent' method and a 'violent' method respectively. The mildest laxatives, are, as stated, articles of diet that unconsciously help forward the motion without interfering with the processes of digestion and absorption of nutrition. Leafy vegetables cooked in oils, the bran of grains, fruits, milk at night, water to prevent the drying up of contents—are some of the helpful items. A glass of water before bed-time, and on rising in the morning may loosen the bowels. Avoid strong tea. Milk mixed with coffee is not so binding. One and the same substance or even normal foods can act as laxatives in some and as purgatives in others, especially when the canal is in an irritable condition and the capacity for digestion is defective. We may consider the simple laxative action exceeded when we feel excessive griping pains before the evacuation, or when the contents of the canal are hurried unduly and in more than the usual number of daily motions, and when the fluid motions approximate the diarrhœic ones of a purgative. Among medicines, the inert oils are liquid paraffin, or olive oil, of which about one-half to one ounce after food may be taken once or twice daily. Cod-liver-oil acts well in children as a laxative as also a supplier of fats and vitamin A and D. If the plain paraffin oil (medicinal) leaks out at the anus unconsciously, then an emulsion of the oil (as in 'Petrolagar') would be preferable. Of course, a laxative acts as a purgative if the dose is large. The best laxative gives us one, perhaps two, easy semi-solid motions without impairing the digestion. The digestion is very probably not affected if the laxative acts only after at least ten hours, and does not, as remarked, cause unusual griping pains followed by undigested stools. The advertised "Kruschen feeling" that is represented to make even senile elders feel equal to facing a hurdle-race or a "leap-frog", may be exhilarating for the time being; but one can be-become an addict to the salt that becomes master instead of servant of Nature.

Purgatives are, more or less, coercive agents, and are best taken under medical advice. Lives have been lost when strong purgatives were given without due care. The quack, seeking a dramatic effect, has sometimes precipitated a tragedy by his 'blasting' tactics, using drastic purgatives like croton oil, where an obstruction was due to an unnoticed disease (like appendicitis or strangulated or twisted intestine), that required immediate and careful surgical handling. To force a passage in these conditions is a fatal proceeding ending, possibly, in a rupture of the bowel and worse. In a case of acute constipation, provided there is pain or colic over a part of the belly, and the pain is progressive, and accompanied by

vomiting, send for the doctor at once and avoid purgatives. No doctor would prescribe a purgative without excluding the possibility of these dangerous conditions.

On the other hand, purgatives are necessary when the intestinal canal contains irritating material from undigested and decomposing foods, or from disease germs that have found their way into the canal. Nature has provided an automatic or self-acting mechanism of purgation in many of the above cases ; the diarrhœas of indigestion,and the diarrhœa of cholera are examples of these. Once the offensive contents are expelled, the patient gets a chance of recovery by careful reconstruction. Some are afraid of taking a purgative prescribed for a diarrhœa or a dysentery. It should now be obvious that it is unsafe to bottle up poisons within our intestines, and an initial purgative is of the essence of rational medical treatment. The doctor knows when the purgatives are to be discontinued without a 'weeping' diarrhœa following the removal of the indigestion or the disease.

This raises the question of what is a safe purgative. The ideal purgative is yet to be discovered, as it should not damage the bowel cells that normally repel invasion by germs. If the germs can be made innocuous by drugs added to the purgative, that would be an advantage. Physicians now-a-days are careful to prescribe purgatives so guarded ; and it is advisable to be guided as to what may be taken with the minimum of risk. If severe griping occurs when using a purgative, and watery motions continue long, the drug is probably causing harm. Once the acute condition is carefully excluded, the chronic constipation may be tackled as aforesaid. The chronic stagnation may cause lost appetite, flatulence (gas), head-ache, irritability and temper (that the housewife promptly counters with castor oil), restless and dreamy sleep, skin eruptions, erections and seminal emissions and even palpitations and fever—a formidable group of ailments avoidable by due attention to our habits.

Aperients or laxatives are legion. The salts in suitable doses (as already described) can be used on the whole with less risk, because, if they fail to act as purgatives, they are soon eliminated through the urine—unlike certain other drugs that are not so eliminated but must find their way out of the system only through the bowels.

The tone of the bowel muscle can be improved by appropriate medication ; the vitamin B contained in the cereals like oats and whole wheat can prevent the weakening of the tone of the bowel muscle.

The X-ray reveals that a barium meal can locate the exact seat of the stagnation and direct the treatment—either in the rectum,the colon, or higher up. A meal reaches the colon in about five hours, and the rectum in eighteen hours or so. This knowledge has rationalised our treatment in recent years.

Knowledge is Health.—The aim of all Health education is to teach people how to look after their own welfare by the intelligent and discriminating use of knowledge. No rational being can help himself intelligently without knowing how to do it, in spite of a whole code of rules the meaning and import of which he has not understood. Where this knowledge is withheld, people would not know how to help themselves, but would have to be perpetually 'spoon-fed' by the state in their daily concerns. Precepts and commandments would find a more powerful and convincing appeal if shorn of mystery and backed by reason,

based on proven and verifiable facts as they are established by science. The taboos and reservations against the imparting of knowledge relating to some of our personal and intimate matters have wrought more harm than good to the individual and to the race. If 'constitution' is regarded as an 'unmentionable' subject unbecoming our modesty or sense of decency, 'venereal disease' is almost a sacrilege we dare not whisper about. And what has been the net result of such taboos on knowledge so vital to our existence? For all our laudable intentions, the ban imposed blindly on all instruction about this 'secret' but insidious plague of mankind bids fair to 'syphilise' the human race. In our hope and anxiety to safeguard our modesty and our morals, we actively suppress valuable information that would save innocence from devastating disease. The ostrich smothers itself to death when it buries its head in the hope of escaping from its pursuers; it might have had a chance to live, had it retained its faculties now stupidly hidden deep in the sand! If a handful of precocious and hot-headed youngsters go astray by knowing more than they ought to know, that can hardly justify the immense risks and dangers we run of race degeneracy that is the paramount issue. Do we not force the ideas of sex on innocent girls and children we marry long before they attain puberty? We do not stop sowing oats for fear that some of the seeds may sprout wild! Can the individual be saved unless we save at the same time his body as well as his soul? The one cannot flourish to the exclusion of the other. They are complementary to each other. Mystery tempts a burning curiosity to investigate, without the prudent warning that knowledge enjoins on behalf of safety and health.

Neither morals nor health can be in danger if the laws of Nature are observed. And the laws of Nature can only be ascertained by scientific observation and reasoning based on impartial knowledge. We should not carry our morality so far as to forget our humanity. If dogma slams the door against scientific enquiry and enlightenment, it blocks the avenues to knowledge, and usurps the office of Nature, for which it is incompetent, with its dictatorial decrees. What is good for health should usually be good for morality. Our morals cannot be assured by our misguided conspiracy of silence when the youth

—By courtesy: The United States Public Health Service.

suffer from disease contracted in sin due to ignorance. The palpable horrors of venereal disease, once understood, would be the best deterrent against the immorality of adultery from which the innocents would have recoiled, had they realised the danger in time. Repression of information thus injures both health and morals, whereas, a more liberal education would rescue both. Should we ban the teaching of biology because it treats of the reproduction of plants and animals ? The scientific approach is, therefore, the rational one, and no ban should be placed on the enlightenment of those exposed to avoidable danger. Knowledge is the right of every human being. If we claim the right to the latest means of curing disease, have we not also the right to know how to prevent it ? Ignorance is no excuse in human law. And relentless Nature does not extenuate offences within her jurisdiction either. Syphilis is the 'divine judgment' upon the *ignorance* that failed to counteract immorality. We scorn to use the weapon ready to hand, and we suffer and condemn our posterity to the same. It is a delusion to imagine that our morals or our modesty can be saved through the 'blessings of ignorance'; this is a snare that entangles mankind in the clutches of debilitating disease. Dogma, unsupported, is grievously losing its hold on mankind. Allied with scientific knowledge, where such is revealed, it cannot fail to exert a tremendous power on mankind. Abstract morality and concrete suffering both cry out aloud for a joint action. Sentiments and prejudices are unreliable guides, as they are easily swayed. The concrete and indelible stamp of suffering on our physical frames are too real and almost permanent. Humanity is to be saved by outlawing ignorance, and not by the repression of knowledge. What is our culture worth if we withhold the best and most useful part of it from the most of mankind ? There is no drastic purgative for the stagnant conservatism of ignorance ! Safety lies in gradual elimination by persuasion that relaxes unbending dogma to reason and reality.

PUBLIC HEALTH AND PLANNING

By L. M. CHITALE, F.R.I.B.A., A.M.T.P.I., *Madras.*

THE subjects for discussion before the Central Advisory Board of Health meeting in Poona, namely the spread of epidemics, the supply of good food, education in hygiene and the spread of tuberculosis are of great importance, and the results of the discussion will, no doubt, bring forth very valuable suggestions for the improvement of public health.

Nevertheless, there are other problems connected with public health such as slums, planning of home and work and healthy environment and other new problems arising from gas attacks under modern warfare, which cannot be neglected, being more fundamental.

Public health activities should aim at not merely defending the population against epidemic diseases but also to create a robust health among the people and prevent disease. To achieve this purpose, proper diet, adequate housing and a wholesome environment become essential. Unfortunately, however, these problems have received very scarce attention

in public policy. Urban life in India, the lives of forty million people, are overcrowded, congested and lack adequate ventilation, water and sanitation and nourishing food. If these are provided, the public health of India would improve better than by most other curative measures in vogue.

Such improved methods are possible only if our agriculture is economically and scientifically planned and cultivation brought in close relationship with man; when housing reforms improve the neighbourhood, and when communities are planted on well planned basis over the soil. Public Health regulations focus attention on expensive health schemes and curative measures but rarely provide for the citizen his due share by way of amenities, air, water and sunshine. A very negligible fraction of the nationl income of India, is being spent on essential welfare work, when compared with other countries. We wish that a reasonable percentage would be reserved towards these essential factors of human welfare. The Government of India would do well to enact comprehensive Town Planning and Housing Act, for the whole of India with powers to alter, to suit the needs and local conditions of the respective Provinces.

If civilisation should survive, replanning towns and cities is inevitable as recent events in Europe show. Air raids are a challenge to slums, inadequacy of street systems and our neglect to apply the principles of systematic planning. Parks and vegetation, copious water supply and wide roads recommended by Public Health Authorities, Planning Experts, and Sociologists, to ensure good health in normal times are now shown to be absolutely essential to resist and recover from the various methods of aerial warfare, and to enable us to decentralise our population and industry which is the fundamental requirement of air defence.

Public Health Planning and National Security seem intimately interrelated and we hope that the demands of air defence at least would secure for our country properly planned cities and towns which will, no doubt, lay the real foundation of a lasting public health planning in India.

Low-Rent Housing

'Low-rent housing' is closely inter-related with 'slum clearance,' but unless the former is taken up in right earnest the eradication of the latter becomes a very difficult task. The principal cause of the creation and existence of slums in a city is nothing but acute shortage of houses available at rents within the financial reach of low income groups. It therefore stands to reason that the authority should take up seriously the question of building new houses in order to relieve scarcity. More provision of low-rent housing at suitable sites all over the city by the authorities on a liberal scale will go far to solve the slum problem, as people getting better accommodation on a lower rental would naturally migrate from slum areas to the now areas. By this action new healthy homes with larger accommodation at lower rents will be available to those people who had the misfortune of having nothing better than tenement hovels. The provision of new low-rent housing will also serve to hasten the improvement of a good many slum areas, as the owners would not only be indirectly compelled to improve their houses on the same lines as those provided by the authorities but to reduce substantially their rents.—Extract from a paper read by N. V. MODAK Esq., B.E., M.I.C.E., M.I.E. (INDIA), M.I.M. & Cy.E. M.R. SANY. I. &c., City Engineer, Bombay Municipality.—*Journal of the Indian Institute of Architects.*

THE ARENA SPORTS

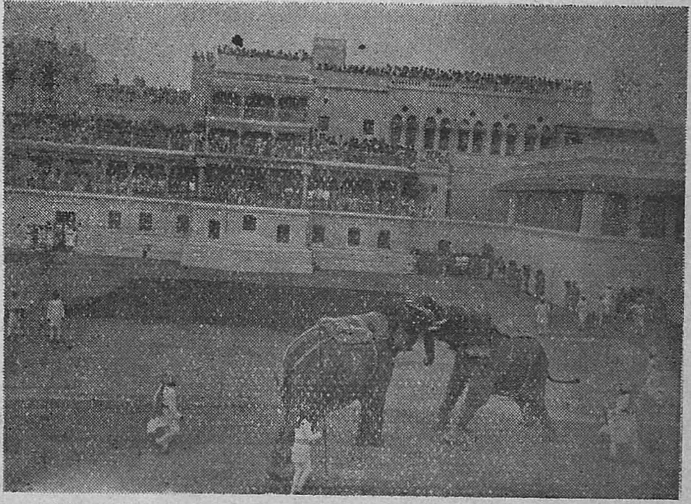
BY B. D. TIPNIS, B. Sc., LL.B., *Baroda.*

THE arena sports, in which animals have a chance to display their skill and pride of strength are by no means common in this age of machinery. The old relics of this heroic sport still linger by the goodness of some elegant Indian princes. Along with professional wrestlers, Baroda State has also maintained rams, buffaloes, and elephants, solely for exhibiting their superior strength during the arena sports. Once in a year, the events take place within a spacious area bounded on all sides by a very thick masonry topped with galleries for the spectators.

BUFFALO FIGHT.

Buffalo fight is one of the exciting items of the programme. The stout animals are ushered into the arena from the opposite corners. As soon as their eyes meet, they make a furious dash with bloodshot eyes, and the fight commences. In modern times, however, the gory battle is cut short within a few minutes in order to prevent casualty of the vanquished creature. A specially trained staff is maintained to noose the animals. They are also hidden from each other by spreading white sheets of cloth between them.

Elephant fight is, by far, the most attractive feature of the events. The magnanimous creatures, though in a perfect mood for a dash, take some time to be really excited. And once they are in for it, the game is superb. This fight too, is curtailed within a few minutes, as otherwise the consquences may be unhappy. A number of heavy prongs with very strong grip, are used to root the animals to the spot. Fire-works are also employed to divert their attention. Then gradually the respective mahouts bring their pet ones under control.



ELEPHANT FIGHT.

These sports are annually held by H. H. the Gaekwar of Baroda who has a deep interest in cultivating manly spirit among his subjects.

THE INFLUENCE OF CLIMATE ON HEALTH IN INDIA

BY K. S. AGARWALA, M.Sc., LL B.,

Poona.

BESIDES factors such as sanitation, a good water-supply, the habits of the people etc., which are of importance from the point of view of health, the climate *i.e.* the average weather conditions of a place, also have a remarkable influence on the health of the people. In India, the nature of the climate is such that it affects human health and activity to a very large extent. An indication of the standard of public health in a country is given by the death-rate figures of that country. In India, the death rate is astonishingly high as compared to that of other countries, diseases are of frequent occurrence and the physical efficiency of the people is generally low. The causes for this state of affairs are many but they are at least partly climatic. In fact, diseases are, to some extent, inevitable in a tropical climate; in this country the climatic conditions coupled with other circumstances of nature render the people all the more prone to many epidemic and contagious diseases.

Of the many separate elements of weather that make up the climate of a place, temperature is by far the most important from the point of view of health. On a comparative study of the mean annual temperatures and the death rates of important cities of the world, it has been shown that between the limits of 40°F. and 80°F. for the mean annual temperature, the colder temperature is the healthier; temperature below 60°F. is very suitable for human life and that below 50°F. is the best. It has also been suggested that a temperature of 32°F. to 40°F. is the worst from the health point of view. In India, the mean annual temperatures generally lie between 70°F. and 80°F. and thus are not very suitable for human life.

An outstanding feature of the Indian climate is the annual variation, depending upon the weather and the rain, of the seasons which dominate the life of India. The year can conveniently be divided into the "cold weather", the "hot weather" and the "rains". Perhaps, the cold weather is the most pleasant season of the year. As already mentioned, mean temperatures near about 50°F, appear very suitable from health point of view. It is said that the cold serves as stimulant and that mental activity reaches a maximum when the mean temperature of the air is near about 40°F. *i.e.*, when there are very mild frosts at night. But the cold, when intense and of a long duration, is depressing instead of being stimulant and leads to disease. During the cold season in India, coughs and colds become distressingly prevalent and pneumonia often figures largely in the health returns; all these are indirectly caused or influenced by cold—either the climate makes the individual more susceptible to the disease or the germ causing the disease is more virulent due to the more favourable climate.

Let us next turn to the hot weather period. It is hardly necessary to emphasise how disadvantageous is the prevalence of extremely hot climatic conditions from the point of view of health as well as efficiency in work. With the hot weather comes the dreadful prickly heat and children because of their sensitive skin, are the

easiest prey to this most irritating of skin troubles. Then, there are the heatstroke cases which sometimes prove fatal to human-beings. Apart from the general discomfort and loss of physical efficiency that are caused by excessive heat, there is another trouble *viz.*, scarcity of water in the rural areas owing to the drying up of wells, ponds, tanks, small rivers etc., which are the main sources of water-supply in those areas; this results in considerable suffering to human beings and cattle. As regards the working efficiency, there is little doubt that it deteriorates in extremely hot weather because one can certainly do more work in a comparatively cool climate than in the burning temperatures and steaming humidities that are, for example, the order of the day during the month of May in northern India, and especially the north-west desert, which is the seat of greatest heat in that month and where day temperatures of 120° F. or over are not infrequent.

During the rainy season—June to October—malaria becomes generally very prevalent and troublesome at least in some parts of the country owing, no doubt, to the exceptionally heavy rainfall that occurs in those parts. Vagaries of the monsoon also very often result in floods which, apart from the considerable loss of life that they cause, render conditions favourable for the outbreak of epidemic diseases.

The climate in India also contributes, it has been suggested, to earlier maturity and thus indirectly promotes prolification at an early age; this results in abnormal infant and maternal mortality on the one hand and in an increase of population pressure on the other.

It is clear that the climate in India is, in general, an important factor in the matter of health. It must not, however, be overlooked that when particular localities are considered, the climate may really be, in some cases, of less importance than many other matters which have no connection with climate. Bad social customs, unhygienic mode of living, malnutrition owing to economic and other causes, for example, must affect the health of the people adversely. The nature of occupation of the people also tends to have an influence on health; it has, for example, been suggested that the higher death-rate in some big cities is due not only to the impurity of the air but also to the fact that the occupation of city people mostly keeps them indoors whereas in the country it keeps them out of doors.

"Rented" Bath Water in Africa

When a visitor takes a bath in Luderitzbucht in Southwest Africa, the importance of wasting no water is very definitely impressed upon him.

A four-gallon tin of water costs $1.00. Every extra gallon costs an additional 25 cents. This is for the rent of the water rather than for its purchase, for the water is used for watering the few plants that grow in the desolate ground. As far as water goes, Luderitzbucht is one of the driest places in the world.

In contrast to the scarcity of water in this section of the world, Americans use water at the rate of more than 100 gallons per capita per day. In fact America leads the world in the per capita use of hot and cold water. Americans pay about five cents per ton for water delivered the easy way—the turn of a faucet.—G. H. F.—*National Health Review.*

INFANTILE LIVER ENLARGEMENT

OR

Infantile Cirrhosis of the Liver

By

S. K. GANAPATHY, AIYAR,

L. M. & S.,

Tinnevelly Town.

Definition.—Infantile enlargement of the liver, is a disease of infants between the ages of 6 months and 3 years of age, and is peculiar to India and is characterised by chronic low fever, enlargement of the liver, general weakness of the body ending in jaundice and contraction of the liver.

General Prevalence and Causes.—It is usually known as "Paulkatti" in the southern districts of the Madras Presidency. It is very common in the southern districts of the Madras and Bombay Presidencies and in Bengal, more prevalent in towns than in villages.

The disease mostly attacks the children of the higher classes such as the Brahmins and is rare among the Mahomedans and Anglo-Indians. It specially attacks the infants of the rich people who overfeed their little ones with plenty of carbohydrate food.

As, among the Hindus, the male children are more affectionately treated and overfed with sweetmeats etc., they are more liable to attack by the disease, than the female ones.

Age.—Children over 6 months and under 3 years of age, during the period of dentition of the child, and reconception of the mother, are generally attacked with the disease. On account of the reconception of the mother, breast milk is lacking, and so the child is fed on boiled cow's milk and barley water.

Causes.—Enlargement of the liver may be due to congenital syphilis, drunkenness in the parents, Malaria, Kala-azar, amyloid degeneration of the liver (due to chronic suppuration somewhere in the body), and infection due to parasites. But in the above-mentioned diseases, there are some distinctive signs and symptoms, which are absent in the Infantile liver peculiar to India, and some of the signs of the latter are not found in the former ones. Microscopic examination of the blood, also shows different results.

The Infantile liver peculiar to India, is caused by overwork of the liver, due to overfeeding of the child, or due to deficiency in the quality, or quantity, of the mother's milk. The liver is one of the chief organs for digestion, as it makes glycogen from glucose, urea from nitrogenous food stuffs, and also manufactures bile, and stores these articles for the use of the body. Overfeeding, giving of unsuitable food such as starchy food and sweetmeats, cause overwork for the liver. When, due to deficiency in the quality or quantity of mother's milk, other unsuitable diets are given, liver gets overwork. Irregularity in the hours of feeding, also causes upset of the functions of the stomach and the liver.

On account of the child getting less of breast milk, but instead getting

cow's milk, sweetmeats and various patent foods, which are sold in the market, the liver gets deranged, and inflamed and thus paves the way for infantile enlargement of the liver.

Europeans and Mahomedans give more proteid matter in the shape of meat soups, whereas the Hindus give more of starchy and carbohydrate foods, and so the Hindu children are more liable to get the disease, as the liver does not so easily assimilate carbohydrates as the proteids.

Symptoms.—The disease at first begins slowly without marked symptoms, and after a few months, when some unusual symptoms are noted, the child is brought to the Doctor, and the enlargement is recognised.

For the first few months, there are some vomiting, flatulence, loss of appetite, and alternate diarrhoea and constipation. There is a low rise of temperature, complexion becomes sallow, urine becomes decreased and high-coloured, sleep is disturbed, and the child loses its usual cheerfulness and becomes dull; when the regular disease shows itself out, there are characteristic signs which may be divided into 2 stages.

I. Stage of Enlargement of the liver.

II. Stage of Liver contraction.

I. **Stage of Enlargement of the Liver.**—In the beginning, there is slight fever, but as time goes on liver enlarges and fever also increases. There is slight constipation in the beginning, which becomes obstinate when the disease progresses. The colour of the stools is at first normal, but after some months it becomes muddy, till at last it becomes whitish. The liver slowly enlarges, and after some months becomes very large, and its lower thin and hard margin can be easily felt. At this stage the superficial veins of the belly become prominent.

Children with enlarged liver have the upper part of their belly big and the chest thin and they breathe with difficulty, very pathetic to look at.

II. **Stage of Liver Contraction.**—In this stage the liver begins to reduce in size suddenly, with high fever, jaundice and swelling in the body. This is a very bad stage. The temperature which was low in the stage of liver enlargement rises to 102° or 104°. The inside of the eyes, skin, etc. become yellow and the urine also becomes very yellow. Stools become pale white, and the hands and feet and the skin of the body generally become swollen.

Prevention of Infantile Liver.— If any previous children of the mother had been affected with enlarged liver, proper history should be elicited to *exclude* congenital syphilis, Malaria, Kala-azar etc. and if the mother is affected with dyspepsia, anaemia or other diseases she must be treated for them and thus her general health improved, so that she might have plenty of breast milk of good quality.

Diet of the Child.—At least till the end of the first year of child's age, it should be fed only on breast milk or if mother's milk is insufficient goat's milk may be given in addition. If goat's milk is not procurable, cow's milk and patented foods may be given sparingly to alleviate the appetite of the child. Highly sweetened malted foods should not be given. The above-mentioned measures will act as *preventive.*

Treatment when the disease has already begun. — The child should be kept as far as possible in fresh air and sun-light. All routine things to keep the child clean such as bathing etc. should be carried out.

Diet.—The child should, as far as possible, be fed on mother's milk, but if mother's milk is deficient in quality

or quantity, the mother should be treated for any dyspepsia, anaemia or other diseases, so that her general health may improve, and get a good supply of breast milk. If this takes a long time or is not possible, a *wetnurse* should be employed for feeding the child. If people cannot afford to appoint a wet-nurse, they can give the children:

(1) Humanised or Peptonised milk.

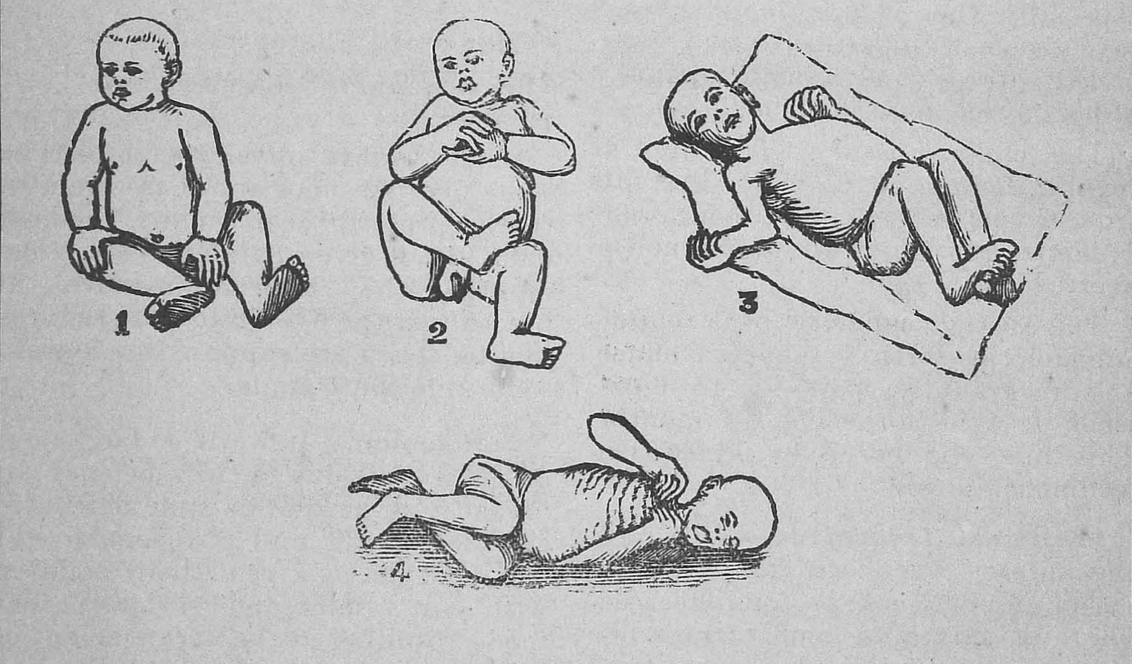
(2) Goat's milk.

(3) Ass's milk.

means of reducing the size of the liver.

2. Next to breast milk, *goat's milk* is a very ideal milk suited for children. Goat's milk also must be diluted with water before feeding, as it contains more percentage of fats, and lactose should be added as it contains less of carbohydrates than human milk. The goat may be allowed to feed on various leaves, and should be kept clean. It is better that one keeps his own goat.

3. *Ass's milk* :—This milk is nearly equal to human milk in consistence but does not keep long, and many children don't like the smell. It is a very dirty animal to manage.



1. Mother-fed. 2. Wet-nurse-fed. 3, Bottle-fed. 4. Rice-fed.

1. *Humanised milk* :—Cow's milk properly diluted and heated slowly on fire, with the addition of Sodium Citrate 1 gr. to an ounce of milk, may be used for feeding children.

From 1 to 3 months of age, cow's milk should be diluted with 3 times the quantity of water; 3 to 6 months with twice the quantity of water; 6 to 12 months with about 1½ times the water. The cow should be allowed to graze only on grass, and should be healthy and clean. Skimmed cow's milk given for 2 months is a good

Fruit juices must also be given such as orange juice, lime-juice diluted with water. For lime-juice there must be more dilution and sugar must be added.

In children over 10 months of age *i. e.*, during the period of dentition, orange and other fruit juices may be given undiluted. Lime juice only is to be diluted.

No starchy food or sweetmeats should be given. Meat extracts and extracts of fish also form good diet for children above one year of age. In case of strict vegetarians, extract of dhal, blackgram, cholam may be given after thoroughly boiling with water and straining. Weak ragi gruel can also be given. The children of vegetarian Hindus of Mysore, who are fed on extract of cholam and dhal, do not get infantile liver, while those in the neighbouring districts, who are not given cholam extract and less of dhal, get the disease.

When the child gets better, and especially when it has cut its teeth say about 18 months of age, well-boiled potatoes and a small quantity of boiled rice may be given.

The child must be given diet at regular hours, at 2 hours intervals from 6 A.M. to 8 P.M., and then every 4 hours at night. It should not be overfed.

The average capacity of a child's stomach at birth is about 1 ounce, and it gradully increases to 6 ozs. when it attains the age of 6 months. This must be borne in mind when feeding children.

Medicinal Treatment.—Till now, the disease has been treated with various medicines as quinine, diaphoretic mixtures and various bile stimulants, and all have been found to be useless.

Some Ayurvedic physicians are of opinion, that fresh cow's urine, 2 to 4 drams for each dose, is very useful to cure the disease, because the urea contained in it acts as a bile stimulant, and increases urine flow.

Constipation is one of the chief accompaniments of infantile liver. In simple cases, it should be treated with ordinary laxatives as Cascara, Rhubarb, grey powder etc., but when the constipation is severe, Sodium Sulphate and Mineral waters must be given regularly every morning, Vegetable laxative as Kalmegh, (Andrographis Paniculata) நிலவேம்பு, is considered to be a specific for this disease, especially in conjunction with a diet of goat's milk—by Dr. Santosh Kumar Mukerji of Calcutta. Fresh extract is far more useful than the liquid extract sold in the market. Dose of this should range from 5 to 20 drops according to the age of the child.

Momordia Charantia (பாவெலைச்சார்) given in one dram doses once daily is also useful.

Some Andhra physicians advertise some liver specifics and these are now freely prescribed by many medical men, and if given patiently for some months, the children improve in health and the liver gradually reduces in size. They are supposed to contain some zinc compounds.

Conclusion.—Infantile enlargement of the liver is due to insufficiency of breast milk, or due to some defect in the breast milk, and as a sequence of this, people overfeed their children with cow's milk and various patent foods resulting in the derangement of liver. Forcible feeding, overfeeding and irregularity in the time of feeding also cause upset of the liver, and pave the way for liver enlargement.

So children should not be overfed, and they should be given ragi gruel and extract of dhal or cholam and if goat's milk is not available, diluted cow's milk may be given in small quantities.

Reference:

1. *Dr. Santosh Kumar's book on Infantile Liver.*

The Triumph of Science

IN HIMALAYAN EXPEDITIONS

BY Dr. S. A. SUBEDAR, L.C.P.S., R.M.P.

Kutiana, West Kathiawar.

WITH no other aim than to reach the world's highest summit, attempts have been made to scale the Himalayas. Many have perished in these attempts. With the exception of the Marquis of Clydesdale who flew over the summit, the Everest has up to now remained unconquered.

These expeditions consisted of men who had previous experience of climbing and included a Medical Officer also. In earlier expeditions, detailed notes of arrangements for transporting provisions, luggage, management of porters, distribution of daily rations, and steps taken to combat the severity of atmosphere at high altitudes were faithfully recorded in a diary. But recently these events were broadcast by the leader of the expedition.

But as far as I know, no authentic notes of these observations from a medical point of view have been published. It must be remembered that in order to climb a height of about 29,000 feet or approximately 5 miles over the sea level, where extreme rarity of air exists, an exceptionally healthy constitution, experience in climbing and nerves of steel are essential. To undertake to scale a steep wall of solid ice about 300 to 1000 feet high, with no foothold, can unnerve a man of Herculean constitution. Consequently, the tests employed in selecting the members of these expeditions are extremely rigid.

The work of climbing these heights are undertaken in gradual stages and as soon as one stage is reached, a temporary camp is established. From this base, fresh attempts are made to reach the next stage. Highly experienced porters accompany these expeditions and work as weight carriers and servants. A member of these expeditions carries with him an oxygen apparatus, a pickaxe, rope and various other necessary articles. Owing to the rarity of atmosphere at high altitudes where even breathing becomes difficult, a mountaineer should carry as little load as possible. Mr. Tilman the leader of the last expedition sugests that Everest should be climbed without the aid of oxygen, since the mountaineer gets himself gradually accustomed to the surroundings. His clothes are made of sheep wool which keep him warm in the biting cold and frost. These are remarkably light in weight. Now-a-days, rubber is reported to be used as clothing and bedding. Tinned fruits, eggs, tinned meat, bacon, lime juice, glucose, tinned milk, coffee, cod liver oil, and brandy form the chief articles of their diet. Cooking is done on stoves.

In the event of an avalanche which sweeps every thing before it, mountaineers are exposed to frost bite, and cold. A number of them have frequently fallen a prey to pneumonia. Besides these, there are many nervous manifestations which have been observed from time to time. One of these is home sickness. A willing member of the party all of a sudden becomes morose and sullen. He seems to take no interest in his surroundings, takes very little food and suffers from sleeplessness. Almost all the members with the exception of a very few suffered from nausea, vomiting, and dislike for food. This is temporary. It has been recorded

that in high altitudes the act of climbing with fast beating pulse, laborious breathing, becomes so very difficult that in order to reach a distance of a few feet it takes a healthy man more than an hour. Even the task of raising the hand and lowering it entails a great deal of exertion.

Members have come across a peculiar illusion and have noted a sensation in which they find themselves pushing a perambulator, while trudging along the heights. Others have found themselves climbing in a dream, have totally lost sight of the road in front of them with the result that they have walked over the precipice and fallen down with disastrous results. Malorry and another noted mountaineer,both members of an early expedition, vanished, while attempting to negotiate the last 1000 feet to reach the summit and have never been heard of. They have probably joined the list of honour. Their deaths are attributed to this climbing in a dream.

Many will question the necessity of these hazardous expeditions at the risk of precious human lives, when there is practically nothing to gain. Only lately, a noted scientist attempted to reach the North Pole cutting his way through the huge mountain of ice. Professor Piccard, inspite of repeated failures, still tries to reach a height of over 10 miles above the surface of the earth.

To a layman, these attempts look like a wild goose chase, but scientifically, they are of great importance. In the first place, they show the spirit of adventure and firm determination for which these Europeans are well known. Secondly, these expeditions bear ample testimony to the fact that with the aid of modern science, human beings can perform deeds which were supposed to be beyond their capacity. From a medical point of view, not only new manifestations of nervous diseases attached to these expeditions have been brought to light, but they have also served to add to our knowledge of the conditions of the body and the mind at high altitudes.

These expeditions have also proved that, by the aid of modern science, man has been able to face and live in unbearable cold, rarity of air, and that, in the teeth of the wrath of the elements, he has been able to reach a height of 28,000 feet above the sea level.

Although the Everest has upto now defied these intrepid mountaineers, it is safe to presume that the conquest of this invincible summit is only a matter of time. Man will ultimately triumph.

WHOOPING COUGH

(Published by the Public Health Department, Travancore.)

Whooping Cough is one of the more readily communicable of respiratory diseases. The gravity of this disease is scarcely realised by the public.

Essentially a disease of childhood, it is acute and distressing. Children from one to ten years are liable to be attacked. The greatest incidence of the disease appears to be between 6 months and 5 years of age.

The disease may involve serious complications.

One attack usually protects the patient from a recurrence of the disease.

Cause and Mode of Infection.—The organism causing whooping cough is present in the secretions from the patient's mouth and nose. The spread of infection is usually direct. The patient expels droplets of infected saliva and mucus during violent coughs. The infection may sometimes be transmitted also by the

soiled articles of the patient. It is through the mouth and nose that infection occurs.

The disease is particularly infectious in the early stage, when it could not be distinguished from a mere cold. Hence the rapidity with which it spreads. A case of whooping cough must be considered as infective from a week after exposure till about a month from the commencement of "whoop."

A fortnight is the usual interval between the time of infection and the manifestation of symptoms. This poriod may, however, vary from 5 to 20 days.

Symptoms.—Whooping Cough is characterised by inflammation of the respiratory tract with a recurring series of short convulsive coughs ending in a long drawn inspiration or "whoop". Its protracted course plays havoc. It may be difficult to diagnose the disease until "whoop" is heard. Violent fits of coughs getting worse at night and terminating in vomiting are highly suggestive of this disease. Its effects are more serious upon indigent children and in those suffering from malnutrition, rickets, tuberculosis or intercurrent diseases.

The onset of the disease is insidious. It takes the form of a feverish cold with bad cough which is worse at night. This is the first stage of the attack. At the end of a week or ten days, the cough instead of subsiding becomes worse and more convulsive. It assumes the form of repeated fits. They may occur several times in quick succession, from a dozen to 50 or 60 times daily. These fits of explosive coughs end with a long inspiratory "whoop". The fits are frequently succeeded by vomiting of tenacious mucus and food particles. This distressing experience leaves the patient perspiring and exhausted. The cough may be brought on by excitement, crying, swallowing of food, irritation in the throat and similar other causes.

Few diseases are more painful to witness than whooping cough. The second stage of violent fits of cough lasts from 3 to 6 weeks, extending sometimes upto three months. It gradually declines when attacks become less and less and finally disappear.

The disease may lead to complications such as broncho-pneumonia, convulsions, excessive vomiting, and bleeding from nose, throat and eyes. The disease is debilitating and causes damage to the respiratory organs. Complications may prolong the course of the disease and protract convalescence.

Treatment.—Good nursing and care are essential for the patient. Precautions have to be duly taken against the spread of infection.

The patient should be isolated for at least 3 weeks and accommodated in a clean and well-ventilated room. Abundance of fresh air is very necessary. The patient should be confined to bed if and when there is fever. The dress should be warm and chills should be avoided. Exclusion of the patient from schools and public places should be enforced throughout the period of presumed infectivity.

Owing to the difficulty of taking food caused by violent coughs and also vomiting characteristic of the disease, the patient's nourishment suffers considerably. It is necessary to feed the patient immediately after a coughing fit, as the feed is then usually retained. Food must be given slowly in a form that could be easily swallowed. Until feverish symptoms have disappeared, the diet should be entirely fluid.

The discharges from the patient's mouth and nose should be destroyed. Articles soiled with such discharges

should be properly disinfected. The sick room and the materials used by the patient should also be disinfected and cleaned.

Prevention.—The prevention of the spread of this disease depends upon a prompt recognition of all cases before the whooping state. It should be remembered that infection may start even before whooping begins.

Children suffering from whooping cough should be excluded from school and public places.

When whooping cough is prevalent, it is necessary to isolate every child having a cough or apparent cold. Daily inspection of pupils for the observation of suspicious symptoms is necessary in schools, when there is an increased incidence of the disease. Suspects should be separated from susceptible children and kept under observation. Children exposed to infection should be kept in quarantine for about three weeks.

These measures are very helpful in the avoidance of infection.

Topics from Medical and Health Periodicals

Growth of Nails

AN INJURY at the base of a fingernail enabled a man to note that the nail grew a little more than half an inch in five months. The nail on the third finger grows more rapidly than any of the others, says a writer in the *Lancet*. Nails grow faster in summer than in winter.—*O. W.*

The Blood Index

THE study of blood crystals has developed so rapidly that it is now possible to tell from their formation whether a patient is suffering from any disease, and exactly what the complaint is. The blood is mixed with copper chloride and allowed to crystallize, and if disease is present, the crystals take up certain formations, from which the disease can be diagnosed.

When tuberculosis is present, the crystals form a Maltese cross; when cancer, sharp, intersecting angles; epilepsy, a fanlike design; diabetes, a bunchy mass, and so on. The chief exponent of this method is Dr. Pfeiffer, a Swiss chemist who has achieved remarkable results.—*Free India.*

America's Oldest Man

CENSUS-TAKERS in New Orleans received a shock when a wrinkled old Negro told them that he did not fight in the Civil War of 1860 because he was then too old!

The man, Charles Parcanses, said that he was born in July, 1810. "The reason I have lived so long is that I am part Indian" he went on, "and I drink water whenever I can get it."

Parcanses said that he had been married seventeen times, but always left his wives, the last time being when he was 122.—*Free India.*

Exercise for Cross-Eyes

"ALTERNATING SQUINT," the most difficult type of cross-eyes, can now be successfully treated by exercise, according to Dr. Frederick W. Brock of Staten Island. A red glass is placed before one eye and a green before the other while both eyes are looking at a special chart of red and green figures. As a result the eyes must be used together, and not one eye at a time.—*New York Times.*

How to Eat

SURPRISING though it may seem, it is a fact that not one in a hundred really knows how to eat. All that most of us do is to bolt down our food or wash it down the throat with beverages and be finished with it within a few minutes. In other words, food is not properly masticated or chewed. So long as it tàstes good, each mouthful of food should be masticated. Then only an adequate flow of digestive fluid is ensured. Thorough mastication also provides for complete insalivation and liquification of the food. This free mixture of saliva is necessary for digestion of starch element contained in the food.

In addition to the above effects of mastication, the thorough crushing and breaking up of the food guards against injury and irritation to the delicate lining of the stomach caused by coarse particles of food being swallowed.

Lastly, hurried mastication results in putting extra burden upon the stomach and at the same time works a direct injury to the teeth by their non-use. One should therefore always eat slowly and masticate every morsel of food properly. If one is in a hurry and finds it necessary to curtail the usual time allowed for meal, one should not eat faster than usual, but eat less.—*The Kemcol.*

Three Present-day Props to Living

THE cigarette is a sort of ground wire through which excessive nervous energy is discharged; alcohol provides an artificial relaxation and an escape from reality; and at the end of the day the hypnotic drug provides final surcease of all that is disagreeable—a sleep and a forgetting. Unfortunately the use of all these props to living is on the increase.—*New England Journal of Medicine.*

Smoking and Ulcers

SMOKING before breakfast is one of the quickest ways to risk ulcer of the stomach, the American College of Surgeons was recently informed in the findings of one of the most extensive investigations ever made of this common affliction.

You get ulcers primarily because you have a weakness for them. There is no generally effective medicine to prevent or cure them,the report said. You have to make a lifelong change in your habits, particularly in your ways of eating,drinking and smoking.

Too much acidity is most certainly one of the general causes of ulcers. Care about eating and drinking habits, is the only safe way to avoid this danger line of acidity. Taking alkaline drinks has little effect.

Acidity can be reduced effectively by more frequent meals. Most important of all are the eating, drinking and smoking habits. "Excessive use of tobacco, especially between meals on an empty stomach, is dangerous. Very bad is smoking in the morning before breakfast."—*O. W.*

Coffee Injures the Heart

DR. ROBERT L. LEVY, of Columbia University, is of opinion that coffee has a definitely deleterious effect on the heart. He tells of two men, one a physician, who suffered pain in the region of the heart while in the habit of drinking two large cups of coffee daily. He gave up coffee and soon was entirely well. The other man, a lawyer, also took two cups daily. He suffered pain after exercise, and was advised to limit his exertions and curtail his work. When he was induced to give up coffee, he soon became perfectly well, and was able to increase his activities.

Many people can testify to the discomforting effect coffee produces in the region of the heart.—*Good Health, (Lond.)*

A Saltless Diet Cures Asthma

A SALT-FREE diet was found effective in treating asthma by Drs. A. V. Stoesser and M. M. Cook, of Minneapolis, according to *Science Service* (May 19, 1939). This was used after all other methods had failed.

While salt is a necessary element of food, it is commonly found present in the food in sufficient quantities to render its use as an addition to ordinary foodstuffs quite unnecessary. This is shown by the well-known fact that in certain uncivilized portions of the world, there are found great populations, numbering millions, who make little or no use of salt, and who do not suffer in consequence. Salt taken in more than small quantities is known to produce poisonous effects, even death. In China, it is frequently used as a means of suicide; hence it is not surprising that its complete disuse should be found highly beneficial in conditions in which important bodily functions are crippled.

For many years, it has been known that the entire disuse of salt is often highly beneficial in cases of epilepsy.

A saltless diet is also known to be useful in many cases of hypertension. or high blood pressure.—*Good Health (U. S. A.)*

Knowledge of Disease

KNOWLEDGE of disease has now advanced so far that it is very often desirable to treat the patient before he knows that he is sick. People stricken with acute disease hasten to their doctor for aid. Those suffering from a chronic disease of insidious onset tend to put off their visit to a doctor and to seek relief by self-treatment. Yet we know that, in many diseases, the best hope for cure depends on early treatment; treatment even before the symptoms appear. This is not only true of tuberculosis but of several other diseases including the two at the top of the list of causes of death: Cancer and heart disease. It is true of diabetes, of many cases of syphilis, and of certain kidney diseases which though so slight as to be overlooked may cause high blood pressure later on.—*Health News.*

Sunlight and Health

SUNLIGHT is necessary for development and health. The modern cult of sunbaking in the nude is abnormal and harmful. Unsuspected diseases, such as pulmonary tuberculosis, may be made worse by sunbathing; hæmorrhage and pleurisy frequently follow. Philostratis, in A.D. 200, said :—

> "The fools go sunbathing with every kind of sunshine and without any discrimination. Especially youth should not be lazy and bake, but should use their vital energy and move and exercise."

Physical exercise in a minimum of loose clothing in the open air in the sunshine is ideal. Controlled sun browning is a sign of health—sun burning is pathological.—*The General Practitioner.*

Religion and Medicine

MEDICINE is one of the most ancient of callings. Its very earliest practice was to worship some deity. In fact, Medicine and Religion were generally inseparable. As an example, in Egypt it was the priest-doctor who established the scholars of medicine in the confines of temple. Within its enclosed gardens, he planted, cultivated and studied herbs which he believed to have medicinal value. It was here that Botany first received serious study.

It was on occasions of pain, distress, misery and suffering that man turned from his worldly affairs and pleasures to his God, imploring relief from the agony that gripped and crushed him. In the consoling words of the priest, and in their own supplications, they found a measure of mental comfort and relief.—*Texas State Journal of Medicine.*

Suffocation—Sudden and Slow

THERE are two kinds of suffocation which are recognised by entirely different and distinct acts of signs and symptoms.

Sudden Suffocation :—In this condition the signs are the sudden onset, the dark bluish colour of face and extremities, the staring eyes, the swollen and perhaps protruding tongue, the distress or terror expression of the face and the unconsciousness of the patient during his violent efforts to breathe. These particular signs are caused by some interference with the venous circulation of the blood.

In *hanging* and *strangulation*, there is constriction round the throat, causing pressure on the great veins of the neck, and in *choking*, the patient has pressure on the blood vessels from the inside by the substance that is impacted or by the violent inspiratory efforts which cause intense venous congestion.

It is this pressure which causes the bluish colour in the face, and the eyes to be staring. The efforts made to get air into the lungs increase the congestion.

Slow Suffocation :—In this condition there is no pressure on the venous trunks. The symptoms are produced by the slow admixture of the poisonous vapour with the blood or by the deprivation of oxygen, whereby result increased drowsiness, with no struggling and a placid face until at last insensibility ends very quietly in death.

The death of a patient is caused by the fact that the oxygen which the blood requires to keep the heart and great nerve centres active becomes gradually diminished. The carbonic acid gas cannot be eliminated. Indeed, more is taken in, and, in consequence, the venous blood coming from the heart cannot get properly purified (or oxygenated) in the lungs; thus the arterial blood gradually becomes venous.

The effect of this on the brain is to cause insensibility, and in time the nerve centre for respiration becomes increasingly paralysed, and the chest movements become slower, until they and respiration cease altogether. At the same time the heart becomes more and more paralysed until complete paralysis takes place and death ensues.

Treatment :—The treatment is practically the same for both varieties. In all cases, however, the first thing to do is to remove the cause in each particular case. In choking, the foreign body must be dislodged: in hanging, the constriction must be removed; and so on.

Next, artificial respiration must be started at the earliest moment, and must be followed by the loosening of all tight clothing about the neck, chest and waist to ensure that there is no restriction on the parts covered. If hæmorrhage is present, this must have attention and medical help obtained at the earliest possible moment.

Shock is treated by wrapping the patient in blankets and by applying hot bricks or hot water bottles to his upper and low extremities and body. On recovery of consciousness, the patient should be given hot stimulants (tea, coffee, meat extracts, etc.), in sips, care being taken first to test his ability to swallow. While all attempts at physical exercise, such as walking, are best avoided until sanctioned by the doctor.—*First Aid.*

An Advantage

"TO what do you attribute your remarkable health?"

"Well," replied the very old gentleman, "I reckon I got a good start on most people by being born, before germs were discovered, thereby havin' less to worry about." —*Washington Evening Star.*

A. B. C. for Fathers

A stands for Ambition. Be ambitous for the children. Give them the best possible chance in life.

B stands for Bravery.

C stands for Courage. Help your boys and girls to face life's difficulties with bravery and courage.

D stands for Dummy and Dont ! So don't give your child a Dummy !

E stands for Education. In addition to what they learn at school, your boys need the education that only a father can give them.

F stands for Father, who should be the children's best Friend.

G stands for Guidance. This, with the help of your wife,is your job.Wise guidance, given by both, will stand the children in good stead all through their lives.

H stands for Health and Happiness —the two are inseparable. Avail yourselves of all the health services for your children and wife.

I stands for Indigestion—which Baby will get if you will insist that he is fed every time he cries !

J stands for Jealousy. Treat all the children alike and never have a favourite child.

K stands for Kindness. I would just like to point out, however, that over-indulgence is not a form of kindness, but is very much the reverse.

L stands for Language. You won't ever use bad language in the presence of the children, will you ?

M stands for Mother, of course. She should be the first consideration in the house. She bears the children and needs all the help you can give her.

N stands for Nerves. These must on no account be discussed before the children.

O stands for Obedience. Enforce obedience before the children get out of hand.

P stands for Patience. A good father needs endless patience. If you have not got it, cultivate it.

Q stands for Quarrels. Set a good example to the children and never have quarrels or cross words in their presence. Be a sympathetic adviser in their quarrels too.

R stands for Reliability. By your behaviour, teach the children to know that they can rely upon your word.

S stands for Security. Children need to feel security. They will be sure of this if they know they can rely upon you.

T stands for Temper. You will have the best results with your family if you keep your temper, and they will respect you for it.

U stands for Understanding. Enter into the children's difficulties and advise them with understanding.

V stands for Virtue. Patience is the greatest virtue.

W stands for Work. " All work and no play makes Jack a dull boy". However busy you are, make time to play with your family.

X stands for the questions the children will ask you as they grow older. Answer them as truthfully as you can.

Y stands for Youth. We sometimes cannot see eye to eye with the young. Try to understand their point of view. It is often very sound.

Z stands for Zest. Encourage the children to enter into everything with zeal and zest. And cheer up when your courage goes down to Zero !—*Mother and Child.*

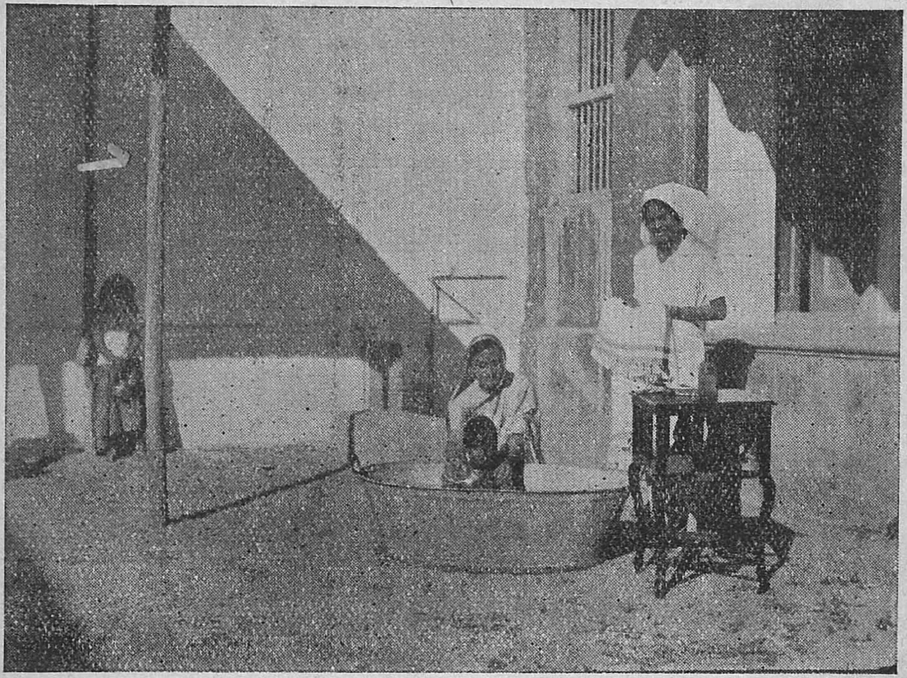
Water and Teeth

Recent experiments in America have shown that almost 30 per cent more tooth decay exists among the children of cities using river and tank water than among those using water from wells and springs. The conclusion was reached that hard water is good for teeth, that tooth decay diminishes as hardness increases.—*O. W.*

Book Reviews

Health for India's millions—Published by *The Help our Mother's Society*, Ujjain—Price Annas. 4.

We have received a copy of the pamphlet "Health for India's Millions" published by the 'Help our Mother's Society', recently formed in Ujjain with the sole object of promoting the welfare of mothers and children in that locality. The Society runs a Swasthya Mandir, 'a modest institution to start with, where men, women and children are given gratis advice and help; expectant nursing mothers and children get free milk, cod liver oil, and clothes if necessary; pre-natal and infant welfare and birth-control advice are also available and facilities in the form of bath and personal hygiene are provided'. In the picture above, the mother is taught the correct bath routine for her child.



Swasthya Mandir—Children's Bath

The institution seems to be an advancement over similar institutions in this part of the country, in that the mothers are taught also sewing, thereby providing a profitable craft for them to do during their leisure hours. The pamphlet gives practical hints for running a welfare institution of this kind and also contains an interim report of the Society. We congratulate the members on their humanitarian enterprise and wish the institution all success.

Central Fixation or Tratak as an Aid to Eye-Sight—*By Dr. R. S. Agarwal.* Published by the Author. Price: Re.1.

This booklet treats about the prevention and cure of defective eyesight without glasses by means of eye exercises. Some patients however, feel some difficulty in practising Central Fixation Exercise and sometimes do it wrongly with the result that they develop defective eye sight and inflammation of eyeball. To them this booklet will serve as a guide. It is written in simple style and illustrated.